

MATTERS ARISING

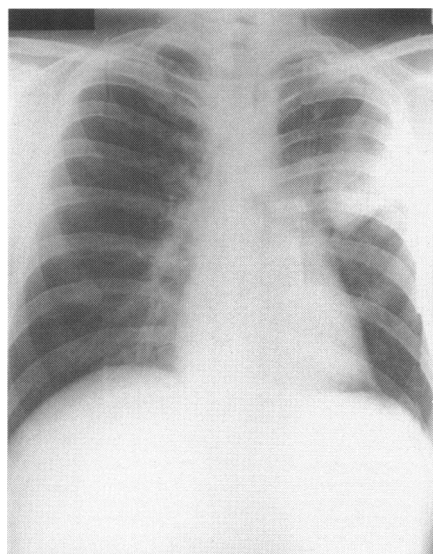
Non tuberculous cavitary disease in a West African man with AIDS

We read with great interest the recent two case reports by Mabey DCW *et al* describing cavitating pulmonary nocardiosis in a West African man with AIDS associated with other opportunistic infections.¹ We observed a similar case (but non-cavitary) of pulmonary nocardiosis in a homosexual caucasian of UK origin, as the first major opportunistic infection. In the past nocardiosis appeared to be more common in Africa than in Europe and America.²

A 36 year old Englishman, who has been known to be HIV positive for one year presented with a 2 month history of persistent fever, watery intermittent diarrhoea, sore throat, night sweats, mild splenomegaly, weight loss, white cell count of $3.7 \times 10^9/l$ neutrophil count of $0.5 \times 10^9/l$ and CD4 count of $50/m^3$.

In the past apart from oral thrush and perianal herpes he did not have any other symptomatic opportunist infections. One year ago he was commenced on zidovudine 250 mg twice daily and prophylactic dose of co-trimoxazol. Subsequently this had to be discontinued as he developed cotrimoxazol related Steven-Johnson syndrome and he was commenced on nebulised pentamidine prophylaxis.

Chest radiograph and CT of chest revealed evidence of upper lobe consolidation (fig). Several induced sputum samples for acid fast bacilli, pneumocystis and gram stain were negative. Subsequently he had two diagnostic bronchoscopies but broncho-alveolar lavage did not reveal any evidence of opportunistic pathogens. A trans-bronchial biopsy was abandoned as he could not tolerate this procedure and he was commenced on empirical quadruple anti-tuberculous therapy in view of the persistent upper lobe consolidation. As he did not improve on anti-tuberculous therapy an ultrasound guided percutaneous lung biopsy was carried out and this showed histopathological evidence of nocardia.



Speciation could not be done as there was not enough tissue sample for culture. Serum LDH 484 IU/l (normal range), and toxoplasma serology <32, multiple blood and mycobacterium avium intracellulare (MAI) cultures (Bactec) were negative.

As an antibiotic of choice pulmonary nocardia was initially treated with high dose oral cotrimoxazol but discontinued after 8 days due to cotrimoxazole related severe itchy rash involving the extremities and oral mucosa. Subsequently he was treated with parenteral ceftazidime and doxycycline for 2 weeks followed by doxycycline maintenance therapy for 4 months. The temperature and the upper lobe consolidation resolved slowly with some residual consolidation despite 4 months of therapy.

Kim *et al*³ and Kramer *et al*⁴ have suggested that nocardia may be increasing in frequency in patients with immunodeficiency due to HIV infection.

This case illustrates the diagnostic and therapeutic difficulties associated in the management of nocardia. To our knowledge this is the first case of pulmonary nocardia in a Caucasian born in the UK who has never been to Africa.

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- 1 Mabey DCW, Lucas SB, Miller RF. Non-tuberculous cavitary disease in a West African man with AIDS. *Genitourin Med* 1992;68:405-8.
- 2 Bailey GG, Neill P, Robertson VJ. Nocardiosis: a neglected chronic lung disease in Africa? *Thorax* 1988;43:905-10.
- 3 Kim J, Minamoto GY, Grieco MH. Nocardial infection as complication of AIDS: Report of six cases and review. *Rev Infect Dis* 1991; 13:624-9.
- 4 Kramer MR, Uttamchandani RB. The radiographic appearance of pulmonary nocardiosis associated with AIDS. *Chest* 1990;98: 382-5.
- 5 Smego RA Jr, Mieller MB, Gallis HA. Trimethoprim-sulphamethoxazole therapy for nocardia infections. *Arch Inter Med* 1983; 143:711-8.

The localisation of treponemes in skin biopsies

In the recent paper on the localisation of treponemes in skin biopsy specimens by Engelkens *et al*,¹ a Steiner stain is used to identify the treponemes in skin tissue.

It is my experience, however, that treponemes are very difficult to identify in tissue with the method described in the reference quoted by the authors, and I feel that the description of the technique they used is not complete.

In order to achieve staining of treponemes in tissue it is essential to pre-incubate the slides with an amylase prior to the reaction with acid-silver nitrate.² This technique is accessible to both paraffin and plastic embedded tissue. In our institution we have obtained excellent results with this method.³

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- 1 Engelkens HJH, Ten Kate FJW, Judanarso J, *et al*. The localisation of treponemes and characterisation of the inflammatory infiltrate in skin biopsies from patients with primary or secondary syphilis or early infectious yaws. *Genitourin Med* 1993;69:102-7.
- 2 Elias EA, Bosma R. Silverstaining for micro-organisms in tissue sections of paraffin and plastic embedded material. *Cell Molec Biol* 1987;33:711-23.
- 3 De Koning J, Bosma RB, Hoogkamp-Korstanje JAA. Demonstration of spirochaetes in patients with Lyme disease with a modified silver stain. *J Med Microbiol* 1987;23:261-7.

BOOK REVIEWS

The Radiology of Acquired Immune Deficiency Syndrome. By Arpan K Banerjee. Bristol Clinical Press Ltd (distributed by Gazelle Book Services Ltd (Lancaster). (pp 132 £15) 1993. ISBN 1-85457-0250.

Not being a radiologist I was somewhat apprehensive about my ability to review this book and do it justice. Fortunately, thanks to the clarity of the text and accompanying investigations I have been guided easily through a very comprehensive tour of HIV radiology. I thought, however, that the title should be changed from AIDS to HIV to avoid confusion as several non-AIDS conditions are discussed.

The book takes the reader through the systems from chest to genitourinary and finishes with paediatrics. The format consists of individual cases with a brief clinical history, questions and relevant investigation. Overleaf a standard answer is given with alternative investigations, differential diagnoses, epidemiological data and references. It is unfortunate and probably a reflection on the time taken to produce this book that none of the references are later than 1990. This means that the epidemiological data cited regarding AIDS cases are out of date and may also explain why progressive multifocal leucoencephalopathy is not mentioned. I would strongly recommend that this be rectified in the next edition. The series editor clearly states that therapeutic information has not been included.

On the whole the pictures are clear and text is easy to understand. The author is to be congratulated on assembling such a comprehensive collection. I was particularly pleased to see sexually transmitted infections other than HIV included in the discussions. Overall I had very few criticisms of the text. A comment on the use of induced sputum and/or bronchoscopy for investigating chest infections should be included. There is an overemphasis on barium investigations, in most centres these have been superseded by endoscopy. It would be useful to see MRI scans and how they compare with CT scans for the diagnosis of cerebral toxoplasmosis/lymphoma. The fact that